



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,035	08/31/2000	Jurgen Babst	0307-0145P	4551
30593	7590	07/14/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			SPOONER, LAMONT M	
P.O. BOX 8910			ART UNIT	PAPER NUMBER
RESTON, VA 20195			2654	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/652,035	BABST ET AL.
	Examiner	Art Unit
	Lamont M. Spooner	2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 26 January 2005.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-54 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-54 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 31 August 2000 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments, filed 1/26/05, with respect to claim1-54 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Steele et al. (Steele, 5,169,342).

As per **claims 1, 14, 27**, Steele discloses a method comprising:

receiving input of a plurality of symbols (Fig. 13g);

determining whether or not the plurality of input symbols include a sequence of symbols dependent upon at least one other symbol (c.3.line 48-59-“syntactic axis”, c.4.lines 45-54-“two or more adjacent icons”-meaning the icons are dependent upon another icon in order to determine syntactical information, Figs. 12a-c-teaches of the syntactical analysis which depends upon the dependent symbol sequence); and

morphing a stored word corresponding to a symbol sequence including the at least one other symbol (Figs. 12a-c-teaches of the syntactical analysis which depends upon the dependent symbol sequence, Input, Parser, Output:tree-structured parse), to produce at least one modified form of the stored word (c.12.lines 20-25” pour(s), Fig. 13g, “the chef

pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 2, 15, 24 and 28**, Steele discloses all of the limitations of claim 1, upon which claim 2 depends. Steele further discloses:

the symbols are input by actuation of corresponding keys on a keyboard (c.3.lines 20-27, Fig. 1-screen keyboard, icons are the symbols inputted).

As per **claims 3 and 29**, Steele discloses all of the limitations of claim 1, upon which claim 3 depends. Steele further discloses:

storing words in a database corresponding to symbol sequences (c.12.lines 40-42).

As per **claims 4, 16 and 30**, Steele discloses all of the limitations of claim 3, upon which claim 4 depends. Steele further discloses:

the database also includes morphing codes (c.3.lines 57-59-his syntactic rules), stored in association with the words and used in morphing the stored words (ibid, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 5, 17 and 31**, Steele disclose all of the limitations of claim 4, upon which claim 5 depends. Steele further disclose:

the morphing codes indicate a part of speech of the stored words (Fig. 12a).

As per **claims 6, 18, and 32**, Steele disclose all of the limitations of claim 5, upon which claim 6 depends. Steele further disclose:

the stored word is morphed in a manner dependent upon the part of speech of the stored word (Fig. 12a-c, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 7, 19 and 33**, Steele discloses all of the limitations of claim 1, upon which claim 7 depends. Steele further discloses:

the stored word is morphed in a manner dependent upon the part of speech of the stored word (c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 8, 20, 21 and 34**, Steele discloses all of the limitations of claim 1, upon which claim 8 depends. Steele further discloses:

the symbols include pictorial (Fig. 13g) illustrations.

As per **claims 9, 22, and 35**, Steele disclose all of the limitations of claim 1, upon which claim 9 depends. Steele further disclose:

accessing a stored word corresponding to a sequence of the plurality of input symbols, in response to determining that the plurality of input symbols did not include a dependent sequence c.3.line 55-c.4.lines 17-his icon image sequence, and paradigmatic stored choices, the paradigmatic choices are determined not to include a dependent symbol sequence, as in they specify what can replace-interpreted as independent, as the syntactical rules specify what may follow-interpreted as dependent)

As per **claims 10, 23 and 36**, Steele discloses all of the limitations of claim 1, upon which claim 10 depends. Steele further discloses:

replacing a dependent symbol sequence with the at least one other symbol, in response to determining that the plurality of input symbols included a dependent sequence (c.4.line 54-c.5.line 8), wherein

a stored word corresponding to a symbol sequence including the substituted at least one symbol is morphed (ibid, c.9.lines 25-40, Fig. 12a-c, c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c, the Examiner interprets the syntactical rules to apply to the entire Invention disclosed by Steele, to include the replaced symbol sequence, and morphing of a word corresponding to a symbols sequence).

As per **claims 11 and 37**, Steele disclose all of the limitations of claim 10, upon which claim 11 depends. Steele further disclose:

storing words in a database corresponding to symbol sequences (c.12.lines 40-42).

As per **claims 12, 25 and 38**, Steele discloses all of the limitations of claim 11, upon which claim 12 depends. Steele further disclose:

the database also includes morphing codes (c.3.lines 57-59-his syntactic rules), stored in association with the words and used in morphing the stored words (c.12.lines 20-25" pour(s), Fig. 13g, "the chef pours" dependent symbol sequence syntactical analysis thereby morphing the word pour to pours and outputting a grammatically correct sentence including the word "pours" instead of "pour" as taught by the syntactical analysis of dependent symbols sequences from Fig. 12a-c).

As per **claims 13, 26 and 39**, Steele disclose all of the limitations of claim 12, upon which claim 13 depends. Steele further disclose:

the morphing codes indicate a part of speech of the stored words (Fig. 12a).

4. Claims 40-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman (5,649,223).

As per **claims 40, 45 and 50**, Freeman discloses a word prediction method comprising:

displaying a plurality of selectable words beginning with an input character, in response to receipt of the input character (C.8.lines 20-25—"set selector...single inputs", C.10.lines 1-10);

determining whether or not morphing data is stored in association with a selected word, in response to receiving selection of a displayed word (c.8.lines 35-43-his words are searched for possible inflections);

morphing the selected word in response to determining that morphing data is stored in association with the selected word (c.8.lines 53-55); and

displaying morphs of the selected word for further selection (ibid).

As per **claims 41, 46 and 51**, Freeman discloses all of the limitations of claim 40, upon which claim 41 depends. Freeman further discloses:

storing words, and morphing data in association with at least one of the words, in a database (abstract, c.8.lines 53-55).

As per **claims 42, 47 and 52**, Freeman discloses all of the limitations of claim 41, upon which claim 42 depends. Freeman further discloses:

the morphing data includes morphing codes indicating a part of speech of the stored words (C.13.line 54-c.14.line 37).

As per **claims 43, 48 and 53**, Freeman discloses all of the limitations of claim 42, upon which claim 43 depends. Freeman further discloses:

the selected word is morphed in a manner dependent upon the part of speech of the stored word (c.13.lines 54-c.14.lines 20, especially c.14.lines 13-20).

As per **claims 44, 49 and 54**, Freeman discloses all of the limitations of claim 40, upon which claim 44 depends. Freeman further discloses:

the selected word is morphed in a manner dependent upon the part of speech of the stored word (ibid).

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
6. Albacette et al., *Iconic Language Design for People with Significant Speech and Multiple Impairments*, ACM 1994, teaches receiving input of a plurality of symbols, determining whether or not the plurality of input symbols include a sequence of symbols dependent upon at least one other symbol, and including the at least one other symbol, in response to determining that a plurality of input symbols included a dependent sequence, to produce at least one modified form of the stored word.
  - Gregor et al., *The application of computing technology to interpersonal communication* at the University of Dundee's Department of Applied Computing, 1999, discusses a predictive retrieval system for Blissymbolics, which is a well known symbolic language, converting symbols and symbol sequences into natural language.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamont M. Spooner whose telephone number is 571/272-7613. The examiner can normally be reached on 8:00 AM - 5:00 PM.  
  
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571/272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ims  
7/4/05

Donald L. Sturm  
PATENT EXAMINER  
AU 2654